

Basic Chemistry of Fire

*Fleet Training Center
Norfolk, Va.*

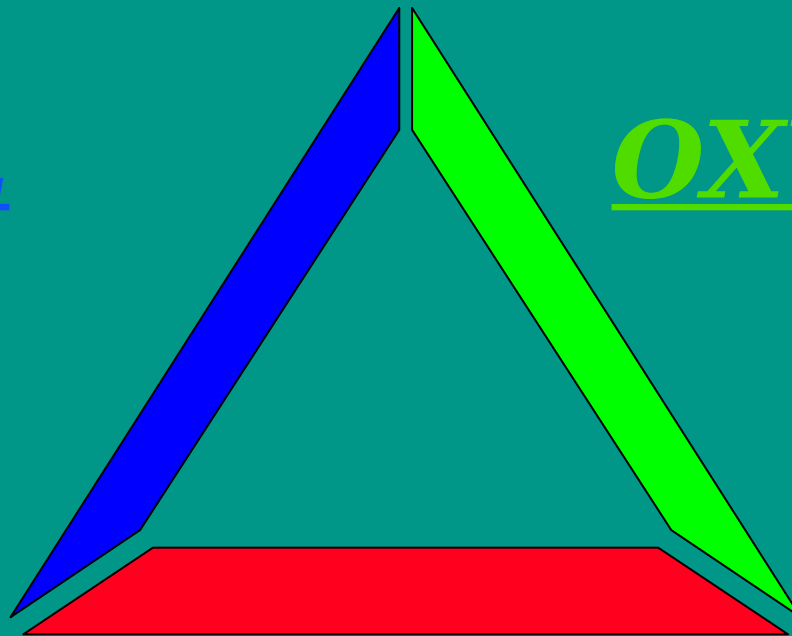
PURPOSE OF FIRE PREVENTION

- *PREVENT FIRES*
- *REDUCE DAMAGE*

Fire Triangle

FUEL

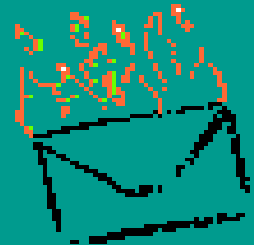
OXYGEN



HEAT

Fire Triangle

- SOLID



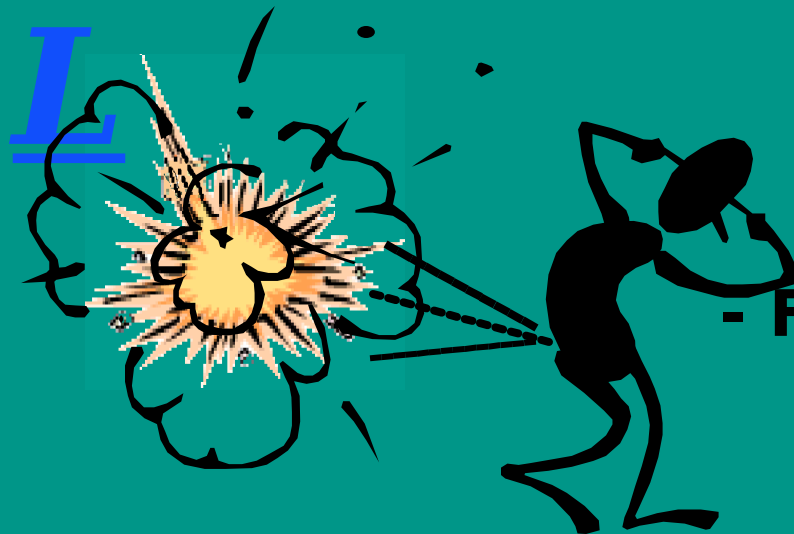
- LIQUID



- FLAMMABLE

GAS

FUE



Fire Triangle

21 %

15 %

3 %

OXYGE

N

Fire Triangle

SPARKS

FRICTION

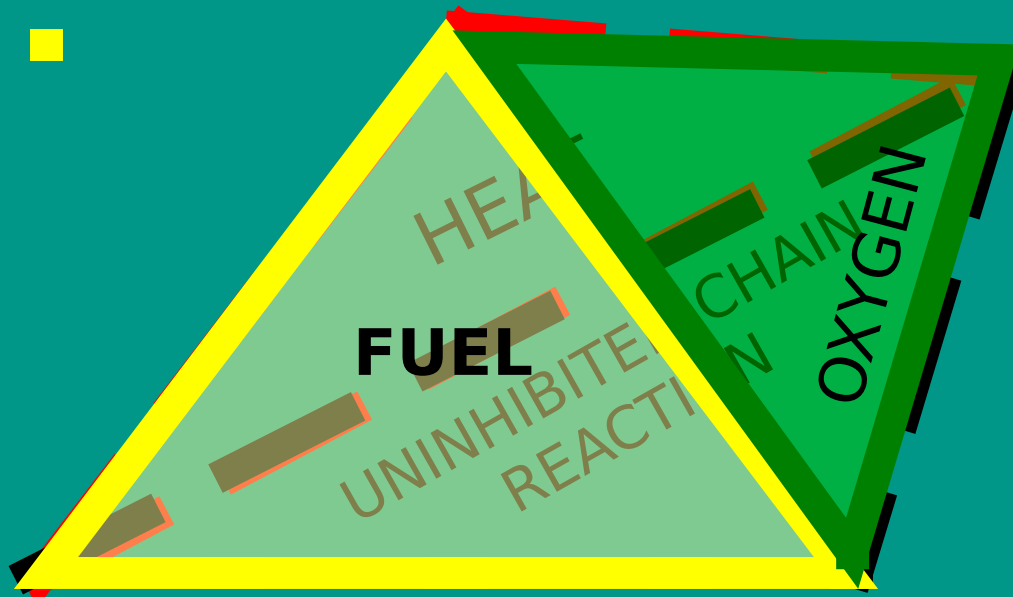
LIGHTNING

MATCHES

HEAT

Fire Tetrahedron

Uninhibited chain reaction



Heat Transfer

- *Conduction*

- *Transfer of heat through direct contact*

- *Convection*

- *Transfer of heat through moving gases*

- *Radiation*

- *Transfer of heat through an intervening body*

Classification Of Fire

- *Class Alpha*
- *Class Bravo*
- *Class Charlie*
- *Class Delta*

Extinguishing Agents

- *Water*
 - *P-100*
 - *Water Management*
- *Halon 1301*
- *Carbon Dioxide (CO₂)*

Extinguishing Agents

cont.

- *Aqueous Film Forming Foam (AFFF)*
- *Potassium Bicarbonate (PKP)*
- *Aqueous Potassium Carbonate (APC)*
- *Steam*

REVIEW AND SUMMARY

